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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,926	06/21/2006	Kim S. Petersen	66722-087-7	5545

25269 7590 10/26/2010

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EXAMINER

MONIKANG, GEORGE C

ART UNIT	PAPER NUMBER
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2614

MAIL DATE	DELIVERY MODE
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10/26/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,926	Applicant(s) PETERSEN, KIM S.	
	Examiner GEORGE MONIKANG	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/574,926.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1, 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krokstad et al, US Patent 5276739 as applied to claim 1 above, in view of Ozawa, US Patent Pub. 20050063553, and further in view of Eid et al, US Patent 7606376 B2. (The Krokstad et al references is cited in IDS filed 4/7/2006)

Re Claim 1, Krokstad et al discloses a method for processing signals from first and second microphones (abstract) in a listening device which has a casing holding the first and second microphones (fig. 2: m1 & m2), a signal processing unit which is to provides an output signal in correspondence with signals from the first and second microphones (fig. 5a: DSP; abstract) and suited to the users hearing, and a receiver unit for delivering the output signal to the user (fig. 5a: SG; abstract), but fails to disclose the steps of (a) determining short term energy in the signals from each of the first and second microphones, and (b) changing the signal processing of the signal processing unit when a change in the difference over time in short term energy between the first and second microphone signals exceeds a threshold, wherein said threshold is selected so as to detect when said casing is being touched. However, Ozawa discloses a touch noise and vibration elimination system for microphones (Ozawa, fig. 1; paras 0048-0049

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& 0051-0052: short term energy is created when the microphone device is being touched because the microphone device is not touched continuously). Eid et al discloses an audio controller system that detects the vibration noise level such that if the vibration noise level is more than a predetermined amount after a predetermined amount of time, a filtered signal is generated to cancel the vibration signal (Eid et al, claim 38). It would have been obvious to modify the Ozawa system such that it would compensate for vibration noises/touch noises by determining if the vibration noise is more than a predetermined amount within a predetermined period of time and if so, then perform vibration/touch noise cancellation. It would have been obvious to incorporate the Ozawa and Eid et al systems as modified into the Krostad et al system for the purpose of enabling the Krostad system to also eliminate noises caused by touch and vibration.

Claims 3-4 & 6 have been analyzed and rejected according to claim 1.

Re Claim 5, the combined teachings of Krokstad et al, Ozawa and Eid et al disclose the method as claimed in claim 3, comprising temporarily interrupting a microphone matching procedure whenever it is determined that the casing is being touched (Krokstad et al, col. 12, lines 44-61).

Re Claim 7, the combined teachings of Krokstad et al, Ozawa and Eid et al disclose the method as claimed in claim 3, comprising a lasting change in the signal processing whenever it is determined that a non-accidental touch of the casing has occurred (Krokstad et al, col. 12, lines 44-61).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE MONIKANG whose telephone number is (571)270-1190. The examiner can normally be reached on 9:00-5:00 EST Monday-Friday, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GEORGE MONIKANG/
Examiner, Art Unit 2614

10/22/2010

/VIVIAN CHIN/
Supervisory Patent Examiner, Art Unit 2614